

INTERNATIONAL SEARCH REPORT

national application No.
PCT/KR2004/001386

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 F24H 9/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 F24H, F24D, F22B, D06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
KR, JP:IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR 1992-0001275 B1 (Ahn, Young-Nam) 10 FEB. 1992 See the whole document	1
Y	KR 1979-0000084 Y1 (Choi, Jin-Woo) 26 FEB. 1979 See the whole document	1
A	KR 1985-0006474 A (Koo, Jin-Hee) 05 OCT. 1985 See the whole document	1-12
A	US 3,968,581 (Fukuyuki Tsunoda) 13 JULY 1976 See the whole document	1-12
A	US 6,647,204 B1 (Harold D. Hutchinson) 11 NOV. 2003 See the whole document	1-12
A	US 4,690,102 (Glen Sundquist) 01 SEP. 1987 See the whole document	1-12

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier application or patent but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
 "&" document member of the same patent family

Date of the actual completion of the international search

26 NOVEMBER 2004 (26.11.2004)

Date of mailing of the international search report

26 NOVEMBER 2004 (26.11.2004)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

LEE, Ik Sang

Telephone No. 82-42-481-5419



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2004/001386

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR1992-0001275B1	10.02.1992	NONE	
KR1979-0000084Y1	26.02.1979	NONE	
KR1985-0006474A	05.10.1985	NONE	
US3968581	13.07.1976	NONE	
US6647204B1	11.11.2003	US6647204B1	11.11.2003
US4690102	01.09.1987	NONE	